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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,606	11/07/2001	Yeshik Shin	594728115US	1030

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EXAMINER

BLOUNT, STEVEN

ART UNIT PAPER NUMBER

2661

DATE MAILED: 09/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/045,606

Applicant(s)

SHIN ET AL.

Examiner

Steven Blount

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

1. Claim 36 is objected to because of the following informalities: the word “and” appearing in line 6 should be replaced with the word “an”. Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 2, 9 – 21, 27 – 29, and 42 - 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over EPO patent application 582,537 to Doney.

With regard to claim 1, Doney teaches, in a process known as “preemption with resume service”, receiving a packet to be transmitted and then detecting that the transmission is to be stopped in favor of the transmission of a packet with a higher priority. See page 8, lines 55+. When the higher priority packet is transmitted, then the information that is left to be transmitted undergoes a restarting of the said transmission (page 9, lines 9+).

Doney does not explicitly teach that the subsequent information which is sent in the restarting period of the said transmission has a second header. However, in page 3 lines 19+ it is noted that control headers are sent which are associated with the data, and it would have been obvious to one of ordinary skill in the art to use control headers (and any other types of headers) with the subsequent transmitted data as well, such that the subsequent data is able to be processed. The examiner notes that without this type of information, it would be impossible to

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process and send the data (ie, if only raw data bits representing the information transmitted were sent). With regard to the following claims, note the following: Cl 2: the starting and stopping at the block boundary would be obvious in view of the frame structure described in pages 3 and 5. Cl 9 - 10: packet switching is discussed in the background of the invention, and it would be necessary to store the data in order to carry out the process discussed above. With regard to claims 11 - 12, see the immediately preceding rejections. With regard to claims 13 - 14, the paths chosen for the packets would be an obvious matter of choice whether the same or different paths are chosen for the first and second packets. With regard to claim 15, it is an obvious matter whether the first or second packet is received first. With regard to claim 16, see the use of the X7E packet on page 5 and note that the use of XOFF would be an obvious variation of this. With regard to claims 17 - 18, see the rejection of claim 1 above. With regard to claims 19 - 20, note that it would be obvious to transmit via the same or separate ports. With regard to claim 21, see the rejection of claim 2 above. With regard to claims 27 - 29, see the rejection of claims 9 - 10 above. With regard to claims 42 - 49, see the rejections above.

4. Claims 6 - 7 and 25 - 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over EPO patent application 582,537 to Doney as applied to claims 1 - 5, 8 - 24, 27 - 29 above, and further in view of U.S. patent 6,470,391 to Takamoto et al.

With regard to claims 6 - 7 and 25 - 26, see the rejection of claim 1 above, and further note that Takamoto et al teaches merging the packets in col 6 lines 30+ and col 7 lines 5+.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have merged the first and second packets of Doney in light of the teachings of Takamoto et al in order to be able to process the information more effectively.

5. Claims 30, 32 – 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 6,470,391 to Takamoto et al.

With regard to claim 30, see the discussion of merging in Takamoto et al, and additionally note that col 7 lines 40+ discuss the merging process to occur in a transmission system. It is noted that the tags can be considered to be the transaction indicators, and figure 24 shows the data header, wherein it would have been obvious to one of ordinary skill in the art at the time of the invention to associate the second packet with a header as well as the first packet in order to be able to route the packets to their destinations.

With regard to claims 32 – 35, see the rejections above.

6. Claims 36 – 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 6,188,670 to Lackman et al in view of EPO patent application 582,537 to Doney.

Lackman et al teach controlling the level of priority of the packets which are being sent to it. See col 5 lines 25+ and col 6 lines 35+. Lackman et al do not, however, teach splitting the data into first and second packets, each associated with a separate header. This is essentially taught in Doney as described above, wherein for the reasons discussed above it would have been obvious to associate a second header with the second group of packets send to the receiver in Lackman. It would have been further obvious to one of ordinary skill in the art at the time of the invention to utilize the splitting of the packets into separate groups as taught in Doney into the system taught in Lackman et al in order to make the data received by Lackman easier to process.

With regard to claims 37 – 41, see the above rejections for their discussion.

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7. Claims 3 – 5, 8, 22 – 24, and 31 are objected to as being dependent upon rejected base claims, but would be allowable if rewritten to include the limitations of the base claims and any intervening claims.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Blount whose telephone number is 571 - 272 - 3071. The examiner can normally be reached on M-F 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Chau Nguyen, can be reached on 571 – 272 - 3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Ajit Patel  
Primary Examiner

SB

9/1/05